

**REMARKS**

Claims 1, 3-18 and 20-25 are pending in this application. By this Amendment, claims 1 and 18 are amended. Reconsideration in view of the above amendments and the following remarks is respectfully requested. Unless otherwise indicated in the Remarks set forth below, the amendments to the claims are made for the purpose of correcting informalities and/or to more clearly define the claimed invention, and are not made for the purpose of overcoming the cited art.

The Patent Office rejects claims 1, 3, 4, 8-13, 17, 18 and 20-25 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,796,477 to Teich et al. (hereinafter "Teich"). This rejection is respectfully traversed.

Claims 1 recites, *inter alia*, "detecting photoacoustic waves resulting from the excitation, wherein the photoacoustic waves are generated by species, including non-fluorescent species." Claim 18 recites, *inter alia*, "a detector which detects photoacoustic waves from the specimen as a result of the excitation, wherein the multiple-photon excitation is generated based on simultaneous absorption of N photons by each of a plurality of molecules in the specimen, where  $N \geq 2$  and wherein the molecules include molecules from non-fluorescent species." Teich fails to teach or suggest these features.

Teich is directed to an entangled-photon microscopy, spectroscopy, and display system in which luminescent or fluorescent materials are used. Although Teich discloses that "entangled photon photoacoustic absorption" could be used, Teich does not provide any details regarding such a methodology. Claims 1 and 18 explicitly recite that photoacoustic waves are detected and are used to generate the spectral image. Teich does not teach or suggest these features. Teich merely states that "entangled photon

photoacoustic absorption” is used, but does not specify whether photons or photoacoustic waves are detected and used.

Accordingly, for at least the reasons set forth above, Applicant respectfully submits that Teich fails to render obvious the subject matter of claims 1 and 18. Claims 3-17 depend from claim 1 and claims 20-25 depend from claim 18. Thus, these claims are also allowable as depending from allowable claims 1 and 18. Thus, withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

The Patent Office rejects claims 5-7 under 35 U.S.C. § 103(a) as unpatentable over Teich in view of U.S. Patent No. 4,808,828 to Kitamori (hereinafter “Kitamori”). This rejection is respectfully traversed.

Claims 5-7 depend from claim 1. Thus, these claims are also allowable as depending from allowable claim 1. Further, Kitamori fails remedy the deficiencies noted above in Teich. Accordingly, withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

The Patent Office rejects claims 14-16 under 35 U.S.C. § 103(a) as unpatentable over Teich in view of U.S. Patent No. 6,567,688 to Wang (hereinafter “Wang”). This rejection is respectfully traversed.

Claims 14-16 depend from claim 1. Thus, these claims are also allowable as depending from allowable claim 1. Further, Wang fails remedy the deficiencies noted above in Teich. Accordingly, withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

In view of the foregoing amendments and remarks, it is respectfully submitted that this application is in condition for allowance. Favorable consideration and timely allowance are respectfully requested.

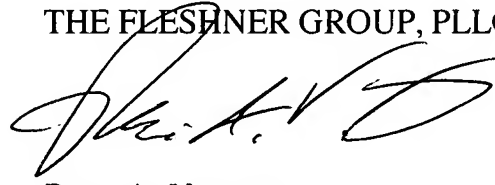
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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 50-4235 and please credit any excess fees to such deposit account.

Respectfully submitted,

THE FLESHNER GROUP, PLLC

A handwritten signature in black ink, appearing to read "Rene A. Vazquez", is written over the printed name.

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